

## CLAIMS

- 1 1. A method for providing information regarding a piece  
2 of electronic mail (e-mail), comprising:  
3 processing a data set containing transmission data  
4 associated with the e-mail so as to determine one or more  
5 steps in a propagation history of the e-mail, the  
6 transmission data including identifiers of a sender of  
7 the e-mail and of one or more recipients of at least a  
8 portion of the e-mail; and  
9 displaying the propagation history.
- 1 2. A method according to claim 1, wherein processing the  
2 data set comprises analyzing transmission information  
3 embedded in text of the e-mail.
- 1 3. A method according to claim 1, wherein processing the  
2 data set comprises analyzing transmission information not  
3 contained in text of the e-mail.
- 1 4. A method according to claim 1, wherein displaying the  
2 propagation history comprises designating a first visual  
3 symbol to represent transmission of the e-mail to a  
4 primary recipient, and designating a second visual symbol  
5 different from the first visual symbol to represent  
6 transmission of the e-mail to a secondary recipient.
- 1 5. A method according to claim 1, wherein displaying the  
2 propagation history comprises designating a first visual  
3 symbol to represent the sender and designating at least  
4 one visual symbol different from the first visual symbol  
5 to represent the one or more recipients.
- 1 6. A method according to claim 5, wherein displaying the  
2 propagation history comprises designating a first color  
3 for the first visual symbol and designating a second  
4 color, different from the first color, for the at least  
5 one visual symbol.

IBM DOCKET

19

#IL9-2000-0047

2010-02-24 10:10:23





3 displaying a hierarchy including the members in the  
4 set; and  
5 displaying the propagation history with respect to  
6 the hierarchy.

1 21. A method according to claim 20, wherein displaying  
2 the propagation history with respect to the hierarchy  
3 comprises superimposing a representation of the  
4 propagation history on the hierarchy.

1 22. A method for providing information regarding a piece  
2 of electronic mail (e-mail), comprising:  
3 scanning the e-mail so as to identify a sender or  
4 recipient of at least a portion of the e-mail;  
5 displaying a hierarchy; and  
6 indicating on the hierarchy a location of the sender  
7 or recipient in the hierarchy.

1 23. Apparatus for providing information regarding a piece  
2 of electronic mail (e-mail), comprising:  
3 a processor, configured to process a data set  
4 containing transmission data associated with the e-mail  
5 so as to determine one or more steps in a propagation  
6 history of the e-mail, the transmission data including  
7 identifiers of a sender of the e-mail and of one or more  
8 recipients of at least a portion of the e-mail; and  
9 a display, configured to display the propagation  
10 history.

1 24. Apparatus according to claim 23, wherein the  
2 processor is configured to analyze transmission  
3 information embedded in text of the e-mail.

1 25. Apparatus according to claim 23, wherein the  
2 processor is configured to analyze transmission  
3 information not contained in text of the e-mail.

1 26. Apparatus according to claim 23, wherein the  
2 processor is configured to designate a first visual  
3 symbol to represent transmission of the e-mail to a  
4 primary recipient, and to designate a second visual  
5 symbol different from the first visual symbol to  
6 represent transmission of the e-mail to a secondary  
7 recipient.

1 27. Apparatus according to claim 23, wherein the  
2 processor is configured to designate a first visual  
3 symbol to represent the sender, and to designate at least  
4 one visual symbol different from the first visual symbol  
5 to represent the one or more recipients.

1 28. Apparatus according to claim 27, wherein the  
2 processor is configured to designate a first color for  
3 the first visual symbol, and to designate a second color,  
4 different from the first color, for the at least one  
5 visual symbol.

1 29. Apparatus according to claim 23, wherein the  
2 processor is configured to drive the display to  
3 graphically display the propagation history.

1 30. Apparatus according to claim 29, wherein the  
2 processor is configured to drive the display to  
3 graphically display the steps in the history in an  
4 animation mode.

1 31. Apparatus according to claim 29, wherein the  
2 processor is configured to drive the display to display a  
3 representation of the sender and at least one of the  
4 recipients, and to display a graphical representation of  
5 movement of the e-mail from the sender to the at least  
6 one of the recipients.

1 32. Apparatus according to claim 23, wherein the  
2 processor is configured to determine two or more steps in  
3 the propagation history of the e-mail, the transmission  
4 data including for each step in the propagation history  
5 identifiers of a sender and one or more recipients of a  
6 respective portion of the piece of e-mail, and wherein  
7 the processor is configured to:

8 receive from a user a designation of an electronic  
9 mail correspondent;

10 find at least one identifier in the transmission data  
11 corresponding to the designated correspondent; and

12 drive the display to display part of the piece of e-  
13 mail responsive to finding the at least one identifier.

1 33. Apparatus according to claim 32, wherein the  
2 processor is configured to:

3 determine a location of the correspondent in a  
4 hierarchy;

5 drive the display to display the hierarchy; and

6 drive the display to identify for the user the  
7 location of the correspondent in the hierarchy.

1 34. Apparatus according to claim 23, wherein the  
2 processor is configured to receive information regarding  
3 a relationship relating members in a set, which set  
4 includes at least some of: the sender and the one or more  
5 recipients, and wherein the processor is configured to  
6 drive the display to display the propagation history  
7 responsive to the relationship.

1 35. Apparatus according to claim 34, wherein the  
2 processor is configured to receive information regarding  
3 a hierarchical relationship relating the members, and to  
4 drive the display to display the propagation history  
5 responsive to the hierarchical relationship.

1 36. Apparatus for providing information regarding a piece  
2 of electronic mail (e-mail), comprising:

3 a display; and

4 a processor, configured to scan the e-mail so as to  
5 identify a sender or recipient of at least a portion of  
6 the e-mail, configured to drive the display to display a  
7 hierarchy, and configured to drive the display to  
8 indicate on the hierarchy a location of the sender or  
9 recipient therein.

1 37. A computer program product for providing information  
2 regarding a piece of electronic mail (e-mail), the  
3 product comprising a computer-readable medium having  
4 program instructions embodied therein, which  
5 instructions, when read by a computer, cause the computer  
6 to:

7 process a data set containing transmission data  
8 associated with the e-mail so as to determine one or more  
9 steps in a propagation history of the e-mail, the  
10 transmission data including identifiers of a sender of  
11 the e-mail and of one or more recipients of at least a  
12 portion of the e-mail; and

13 display the propagation history.

1 38. A computer program product according to claim 37,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to analyze transmission information  
4 embedded in text of the e-mail.

1 39. A computer program product according to claim 37,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to analyze transmission information  
4 not contained in text of the e-mail.

1 40. A computer program product according to claim 37,  
2 wherein the instructions, when read by the computer,

3 cause the computer to designate a first visual symbol to  
4 represent transmission of the e-mail to a primary  
5 recipient, and to designate a second visual symbol  
6 different from the first visual symbol to represent  
7 transmission of the e-mail to a secondary recipient.

1 41. A computer program product according to claim 37,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to designate a first visual symbol to  
4 represent the sender and designate at least one visual  
5 symbol different from the first visual symbol to  
6 represent the one or more recipients.

1 42. A computer program product according to claim 41,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to designate a first color for the  
4 first visual symbol and designate a second color,  
5 different from the first color, for the at least one  
6 visual symbol.

1 43. A computer program product according to claim 37,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to graphically display the propagation  
4 history.

1 44. A computer program product according to claim 43,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to graphically display the steps in  
4 the history in an animation mode.

1 45. A computer program product according to claim 43,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to:  
4 display a representation of the sender and at least  
5 one of the recipients; and



6 display a graphical representation of movement of the  
7 e-mail from the sender to the at least one of the  
8 recipients.

1 46. A computer program product according to claim 45,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to display an arrow to represent the  
4 movement.

1 47. A computer program product according to claim 37,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to determine two or more steps in the  
4 propagation history of the e-mail, the transmission data  
5 including for each step in the propagation history  
6 identifiers of a sender and one or more recipients of a  
7 respective portion of the piece of e-mail, and wherein  
8 the instructions, when read by the computer, cause the  
9 computer to:

10 receive from a user a designation of an electronic  
11 mail correspondent;

12 find at least one identifier in the transmission data  
13 corresponding to the designated correspondent; and

14 display part of the piece of e-mail responsive to  
15 finding the at least one identifier.

1 48. A computer program product according to claim 47,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to display e-mail content sent by the  
4 correspondent.

1 49. A computer program product according to claim 47,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to display e-mail content sent to the  
4 correspondent.

- 1 50. A computer program product according to claim 47,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to:  
4 determine a location of the correspondent in a  
5 hierarchy;  
6 display the hierarchy; and  
7 identify for the user the location of the  
8 correspondent in the hierarchy.
- 1 51. A computer program product according to claim 37,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to: (a) receive information regarding  
4 a relationship relating members in a set, which set  
5 includes at least some of: the sender and the one or more  
6 recipients, and (b) display the propagation history  
7 responsive to the relationship.
- 1 52. A computer program product according to claim 51,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to receive geographical information  
4 about the members.
- 1 53. A computer program product according to claim 51,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to receive hierarchical and  
4 geographical information about the members.
- 1 54. A computer program product according to claim 51,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to receive hierarchical information  
4 about the members.
- 1 55. A computer program product according to claim 54,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to receive for each one of a plurality  
4 of the members, information indicating: (a) who reports  
5 to that member and (b) to whom does that member report.

- 1 56. A computer program product according to claim 54,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to:  
4 display a hierarchy including the members in the set;  
5 and  
6 display the propagation history with respect to the  
7 hierarchy.
- 1 57. A computer program product according to claim 56,  
2 wherein the instructions, when read by the computer,  
3 cause the computer to superimpose a representation of the  
4 propagation history on the hierarchy.
- 1 58. A computer program product for providing information  
2 regarding a piece of electronic mail (e-mail), the  
3 product comprising a computer-readable medium having  
4 program instructions embodied therein, which  
5 instructions, when read by a computer, cause the computer  
6 to:  
7 scan the e-mail so as to identify a sender or  
8 recipient of at least a portion of the e-mail;  
9 display a hierarchy; and  
10 indicate on the hierarchy a location of the sender or  
11 recipient in the hierarchy.